



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

134233

Ms. Louise Corrigan
Environmental Affairs Department
Chemical Leaman Tank Lines, Inc.
102 Pickering Way
Exton, PA 19341-0200

MAY 10 1991

Re: William Dick Lagoons Site
Geraghty & Miller Proposed Hydrogeologic Work

Dear Louise:

Enclosed you will find a memorandum from Kathy Davies, EPA Site Hydrogeologist, expressing her comments on the additional hydrogeologic work proposed for the William Dick Site by Geraghty & Miller (G&M) in a letter to me of December 12, 1990. Yes, sooner or later we do get around to responding to such things.

Kathy's comments on Figure 1 were generated in response to concerns which I expressed to her. I believe it is essential that we take measures to determine a best estimate of the extent of the groundwater contaminant plume emanating from the site, particularly as it impacts site residents. At this point, I am convinced that the existing hydrogeologic data is inadequate to reasonably conclude that the site contaminant plume has not migrated to home wells north of the site on Hill Road, northeast of the site between North Sandy Hill and Telegraph Roads (both sides of the intersection), and south of fault F-3. I agree that contaminant "hits" in these areas are inconsistent, but site-related contaminants have been found on occasion (See Figure 4 attached).

EPA wants to make an effort, within reason, to determine if site groundwater contaminants have impacted or can be expected to impact these home wells. At the least, we desire sufficient information to conclude which homes we should continue to focus our monitoring and remedial efforts on. For this reason, the proposed additional monitoring wells are presented on Figure 1.

Please have Nick Childs or Greg Shkuda call me within a few days to discuss this letter and attachments. Kathy and I are prepared to meet with G&M if necessary.

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Note that I have also included a May 2 memorandum (with attachments) addressed to me by Jeff Dodd of our Central Regional Lab regarding the Quality Assurance (QA) information for residential well sampling and analysis sent to me earlier by G&M. Nick and Don Emig should be prepared to discuss this memo at our meeting on May 16.

Sincerely,

Jack Kelly
Jack Kelly
Project Manager

cc: Kathy Davies w/attach.
Pat Anderson
Jeff Dodd
Kate Fox, SAIC w/attach
Nick Childs w/attach
Don Emig w/attach

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region III

841 Chestnut Building
Philadelphia, Pennsylvania 19107

MAY 09 1991

SUBJECT: Additional Hydrogeologic Work at William Dick Lagoon
FROM: Kathy Davies, Hydro
TO: Jack Kelly, RPM

I have reviewed the proposed work presented by Geraghty and Miller per letter to you of December 12, 1990 and have the following comments:

Task

2. It is not clear if this proposal will be followed by a work-plan specifying the details of the tasks to be completed. For example, it is proposed that the deep wells will be drilled and packer testing will be conducted every 50 feet (approximately). Will the packer testing be concurrent with drilling or will the entire depth of the well be drilled first? What will be the criteria for a particular zone to be packer tested? How many volumes of the packed interval will be removed prior to sampling? What will be the minimum/maximum screen length intervals? Drilling must be terminated if a highly contaminated zone is encountered prior to reaching the anticipated final well depth. Double casing must be considered before the fracture zone can be completely breached and a new fracture zone is encountered.
3. Ground water samples should be analyzed for basic water quality parameters (i.e., common cations/anions) to better characterize potential contaminant pathways and source areas. A second round of target analyses is expected, based on previously documented seasonal fluctuations.
4. Because of the extremely complex hydrogeologic regime at the site, it is expected that several pump tests will be necessary to evaluate the aquifer's response to pumping, determine interconnectivity among monitoring (and not likely residential) wells and areas of the aquifer. Groundwater samples should be taken at logarithmic intervals during the pumping tests.

Figure 1

The approximate well locations proposed by G&M seem to be appropriate as an initial step in further characterizing the

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site. If you are interested in gaining more insight to the interconnectivity of the site and contaminated residential wells, then I think we need to look at available well construction information for the residential wells and add a few additional monitoring wells between the lagoons and the home well. I have sketched pertinent geologic features, such as the fault and fracture traces, as well as a few possible new well locations on the attached map.

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Added wells per K. Davies 5/9/91

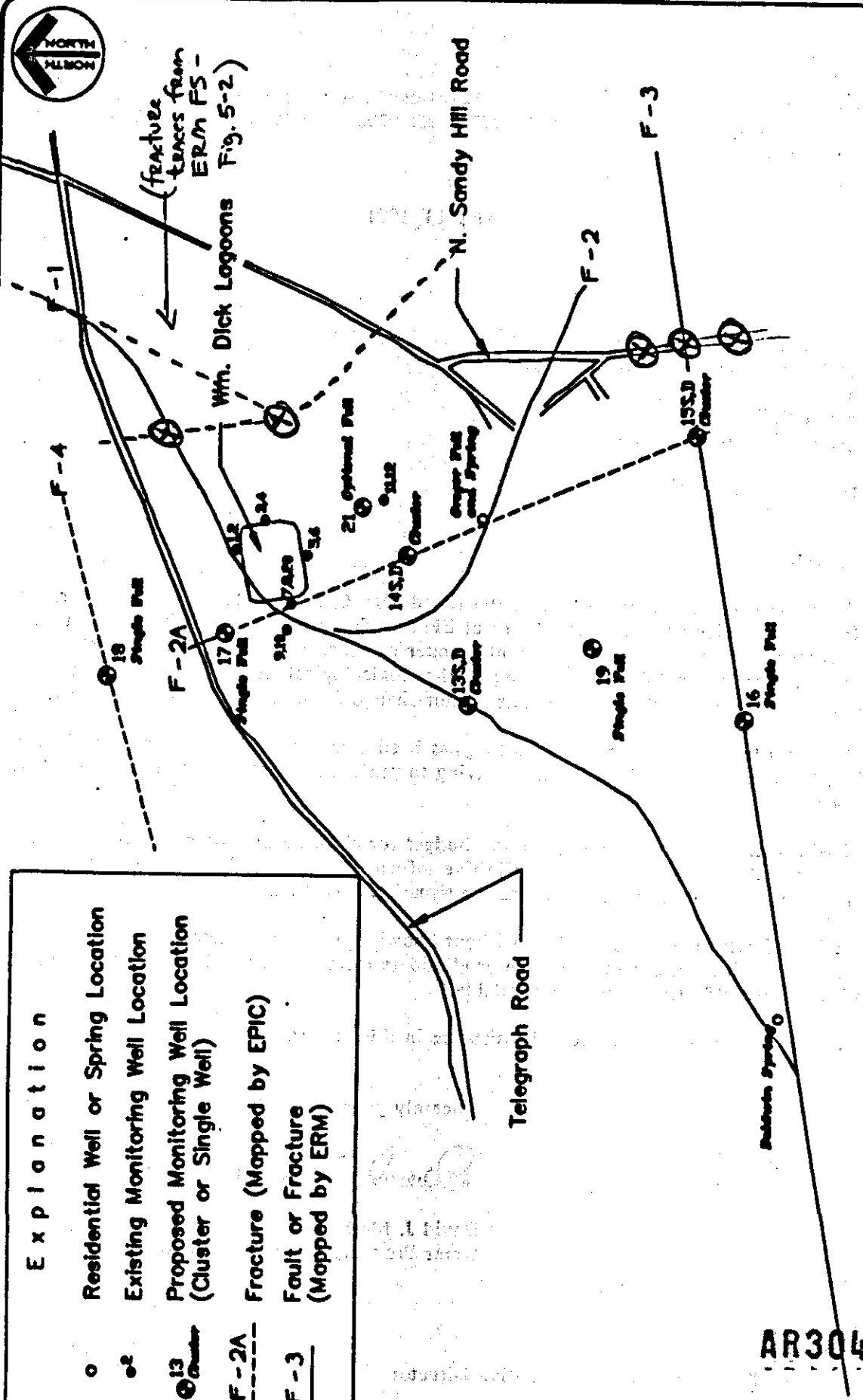
DATE: 9-11-90 PROJECT NO.: WTA3001 FILE NO.: 1312 CAD FILE: DIA

COMPILED & SHOWN

MAP: N. CHAS

DRAFTER: G. SHAW

Explanation	
○	Residential Well or Spring Location
●	Existing Monitoring Well Location
⊙	Proposed Monitoring Well Location (Cluster or Single Well)
---	Fracture (Mapped by EPIC)
- - -	Fault or Fracture (Mapped by ERM)



FIGURE

1

PROPOSED WELL LOCATIONS
 WILLIAM DICK LAGOONS, WEST CALN TOWNSHIP, PENNSYLVANIA
 CHEMICAL LEAMAN Exton, PA

0 1000 FT

GERAGHTY & MILLER, INC.
 Environmental Services

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